

VISITING OFFICER QUARTERS

OVERVIEW

Included in this Standardization Definitive Design are facilities classified Visiting Officer Quarters (VOQ). This package presents the mandatory living unit layouts. Also provided are suggestions for the arrangement of other mandatory and optional functions. These suggestions illustrate the appropriate area requirements and several options for their arrangement. These layouts may be rearranged as appropriate to best accommodate the needs of the installation.

INTRODUCTION

Over the years many different designs have been developed for visiting officer housing at Army installations. The quality of visiting officer housing is recognized as a significant contributor to the utilization of Army facilities. Quality housing for Army personnel is one of the long standing objectives, and is reaffirmed in this definitive design. An equally significant goal is economy of design and construction.

Under the direction of the Vice Chief of Staff of the Army, the Army Facilities Standardization Program seeks to address issues of quality and economy by providing "definitive design" documents which illustrate design objectives and criteria to both planners and designers in a clear and direct manner. At the same time, since VOQ requirements will vary widely among commands, installations, and geographic regions, it is desirable to preserve as wide a range of appropriate choices as possible for installation commanders and their staffs. In the case of the VOQ facilities, the concepts of living unit modularity, provisions for long and short term requirements, and choices among a range of logical material systems will insure that the commander's flexibility to adapt his housing program to the installation's needs is maintained.

DESIGN OBJECTIVES

The design objectives for this definitive are based on direction provided at the July 1987 General Officer's Committee meeting, at the UOPH/VOQ Subcommittee meetings, and by established criteria. These objectives include the following:

- Provide a short-term arrangement for TDY stays of 30 days or less. This arrangement would approximate what is commercially available in hotels and motels.
- Provide a long-term arrangements for stays longer than 30 days. These would be the same layout as the Company Grade UOPH living unit to provide installation flexibility. More living area, including a kitchen, is one of the requirements for the long-term unit.
- Provide improved design and increased amenities, approximating commercial standards.
- Use interior corridors for circulation versus exterior balconies.
- Establish mandatory living unit plans that are assembled into modules of four units per floor.
- Arrange "noisy" areas in adjacent rooms so that they share a common wall.
- Recess doorways to reduce the "tunnel effect" of hallways, and provide additional pass-by space in the corridors.
- Group window units together for construction economy and to provide a stronger architectural element on the facade.
- Arrange interior living spaces so that exterior views may be obtained, and use the bathroom/closet/kitchen space as a "buffer" between the corridor and living spaces.
- Arrange bathrooms and kitchens so that plumbing runs can be consolidated efficiently, and are not located on an outside wall.

GENERAL BUILDING ARRANGEMENT

Given the variations in individual installation housing needs, it is not practical to attempt to develop a complete building design as a "standard". This would take away much of the installation commander's flexibility to address the specific needs at his post, and would likely result in some under- or over- programming to make the installation's requirements fit an arbitrary building size.

The best approach is to develop a modular building scheme which allows for quantitative adjustments to more closely fit each installation's requirement. This is accommodated by a general building scheme which calls for living unit wing(s) and various mandatory and optional support modules connected to a central core area module.

- The living unit wing is composed of identically sized living units in groups of four. These units may be the long term or the short term living units, or both, as described below. For multi-story construction these units must be "stacked" atop each other. The overall length and height of each wing will be selected to accommodate the particular "grade mix" of officers at an installation. Similarly, the number of floors may be chosen to best accommodate the site area available. If both types of units are provided, the building will consist of two residential wings separated by the core area module. If only one type of unit is provided, only one residential wing is required, and the core area module may then be placed at either end. It is allowable to divide the total number of living unit modules in order to provide two wings of identical units, with the core area module connecting them.

- Short Term Living Units are designed for short term stays of 30 days or less. These units are provided a combined living and sleeping area, private bath, and storage area with a minimum net living area of 270 square feet.

- Long Term Living Units are designed for longer stays. These units are provided with a separate living and bed room, kitchen, private bath, and storage area. These units have a minimum net living area of 420 square feet.

To take maximum advantage of the concept of modularity, units of the same size and configuration will be grouped together, in modules of four living units per floor. Therefore, all references to the living units will be by modules which includes four units and the corridor. The four unit living unit module consists of two units placed back-to-back, on each side of the corridor. When determining the total number of units it is important to remember this modular approach since the number of units must be divisible by four times the number of floors (divisible by eight for two floors, twelve for three floors, etc.).

- The Core Area Module provides a lobby, laundry and service space, vending, public phones, restrooms, and the primary means of vertical circulation. This module typically connects the living unit wings. The wings may be joined to the central core in a configuration which best fits the site. For the purposes of this definitive design, two layouts were chosen, a "L-scheme" and an "I-scheme". The "L-scheme" is best suited for square sites and larger buildings, and the "I-scheme" for tight or long and narrow sites, and smaller buildings.

- The desired support modules may be "plugged-in" to one or more sides of the core area module. These modules provide an activity space that may be designed to accommodate anything from TV viewing to weight lifting, a space for mechanical equipment, and options for additional storage, offices, mail, field gear washing and storage, etc.

The modules, both mandatory and optional, that apply to VOQ projects are listed below. Detailed information on the mandatory and optional features of each module are given on the drawings that follow.

MANDATORY MODULES

- Short Term Living Unit Module (4 living units)
- Long Term Living Unit Module (4 living units)
- Stair Module
- Core Area Module
- Multi-Purpose Activity Room (MPAR) Module
- Mechanical Services Module - (As required by the installation.)

OPTIONAL MODULES

- Bulk Storage Module
- Office Module
- Mud Room Module
- Covered Bicycle Parking Module
- Transition Module
- (Other modules may be created for additional functions requested by the installation.)

PROGRAM AREAS

To determine the overall size of a VOQ complex, the following calculations must be performed.

- First, determine the number of Short Term and Long Term living unit modules required.
 - Divide the number of Short Term Units by 4. Divide the number of Long Term Units by 4. Both results must be whole numbers since partial modules are not allowed.

- Second, multiply these numbers by the appropriate areas given below.

- Short Term Living Unit Module - 1,460 gross square feet per module. This includes four living units and the corridor.
- Long Term Living Unit Module - 2,250 gross square feet per module. This includes four living units and the corridor.

- Third, add 20% to the area obtained above to provide for the mandatory modules listed below.

- Core Area Module. (11.5% of the total living unit module gross area.)
- Multi-Purpose Activity Room Module. (3.5% of the total living unit module gross area.)
- Mechanical Services Module. (5% of the total living unit module gross area. This allowance is approximate and may vary depending on the needs of the installation. If the mechanical equipment requires more or less area than is provided, adjust the percentages above before adding it to the total living unit module gross area. This adjustment needs to occur during the programming process since functional areas may not be reduced to compensate for additional mechanical space.)

- Fourth, add the following mandatory module as needed to provide adequate vertical circulation.

- Stair Module - 200 gross square feet per floor for each enclosed stair and 100 gross square feet per floor for each unenclosed or open stair (which includes monumental stairs if provided). A suggested arrangement is two open stairs at the ends of the residential wings, and one enclosed stair in the lobby. This arrangement may be altered if desired.

- Finally, add any desired optional modules. More information on the optional modules may be found on the drawings that follow.

ADDITIONAL PROGRAMMING CONSIDERATIONS

Any increases in scope or cost due to the following items should be added during the programming phase and may not, under any circumstances, cause a decrease in other functions or spaces.

- If the Mechanical Services Module must be increased, its area must be added to the project total.
- If any optional modules are desired, their area must be included in the project total.
- Sprinkler systems, if required due to the use of an unenclosed monumental stair, extended travel distances, or other special requirements, will add to the cost of the facility. Sprinkler requirements must be considered during the programming phase, after any special requirements have been noted and fire and life safety codes have been researched, to insure adequate funding.

- Special requirements such as landscape irrigation systems, kitchenettes in the short term living units, exterior wall options, etc. will add to the project cost and/or scope. This must be taken into consideration while programming. For additional information on exterior wall options, refer to sheet V-5.

- Elevators will increase the project cost. If additional lobby area is required for the elevator, equipment room, and elevator lobby, the project scope will also increase.

For an example on determining the total square footage requirement for a VOQ, refer to sheets V-10 and V-12.

ARCHITECTURAL STYLE

In today's world, and particularly in the design of publicly-owned facilities, an architect does not normally begin the process of building design with a predetermined intent to replicate a particular style. Rather, building design must be motivated at the outset by an intent to satisfy the functional requirements of the building program and to meet the constraints of the building budget.

Over the years in many publicly-owned buildings this approach has regrettably resulted in many amorphous, unappealing, and "style-less" structures. In recent years, however, installation commanders in all branches of the service have recognized the desirability of attempting to design new structures with some consciousness of the elements of "style". This is especially true where a common style such as Spanish Colonial Revival, for example, already exists on the installation. In the absence of an identifiable style, it may be desirable to at least maintain a consistent use of exterior building materials over an installation or some local portion of it. Many Army installations today have developed detailed Installation Design Guides to assist designers in incorporating appropriate stylistic elements in new designs. Each VOQ designer must become familiar with the local installation policies and must satisfy them in the final design.

In the case of the VOQ Definitive Designs, each individual project should be treated in a manner compatible with other facilities on the installation. The decision to deliberately employ stylistic elements in the design or to use one or more specific building materials is to be made by the installation and its construction agent. It is the intent of the definitive design to leave this issue for resolution by the project architect and his client. For this reason, no attempt has been made to specify the mandatory use of materials (although some suggestions are provided). Some specific elements which have a large impact on the structure's aesthetic appeal and compatibility with other buildings are the shape of the roof and material used (to include cornice treatment), the use and configuration of porticos or overhangs at entries and the treatment and detailing at doors and windows. Obviously the choice of exterior materials, and their colors and texture are important. All architectural styles depicted in this definitive design are included only as examples of the adaptability of the schemes to various styles.

Interior finishes are also suggested in order to promote an improvement in the "livability" of these facilities. While one part of the objectives of definitive designs is to provide design and construction economy, an equally important one is the improved livability and, in turn, increased use of government quarters. Therefore, it is recommended that these options be looked at first from a standpoint of livability, and secondly from an economic viewpoint.

INDEX OF DRAWINGS

- V-1 COVER SHEET
- V-2 DESIGN SUMMARY
- V-3 LIVING UNIT LAYOUTS
- V-4 HANDICAPPED LIVING UNIT LAYOUTS
- V-5 EXTERIOR WALL OPTIONS
- V-6 SUPPORT MODULES - "L-SCHEME"
- V-7 SUPPORT MODULES - "I-SCHEME"
- V-8 SUPPORT MODULES - "I-SCHEME"
- V-9 SUPPORT MODULES - "I-SCHEME"
- V-10 ILLUSTRATIVE FIRST FLOOR PLAN - "L-SCHEME"
- V-11 ILLUSTRATIVE SECOND AND THIRD FLOOR PLAN - "L-SCHEME"
- V-12 ILLUSTRATIVE FIRST FLOOR PLAN - "I-SCHEME"
- V-13 ILLUSTRATIVE SECOND AND THIRD FLOOR PLAN - "I-SCHEME"
- V-14 SITE PLAN - "L-SCHEME"
- V-15 SITE PLAN - "I-SCHEME"
- V-16 ARCHITECTURAL ADAPTATIONS - "L-SCHEME"
- V-17 ARCHITECTURAL ADAPTATIONS - "I-SCHEME"
- V-18 BUILDING SECTIONS
- V-19 TYPICAL WALL SECTIONS
- V-20 TECHNICAL INFORMATION

Symbol	Description	Date	Approved
● THINK VALUE ENGINEERING - IT SAVES MONEY ●			
U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS TULSA, OKLAHOMA			
FACILITIES STANDARDIZATION PROGRAM VISITING OFFICER QUARTERS			
DESIGN SUMMARY AND INDEX			
Designed by: Joy Clark	Scale: NONE Date: NOVEMBER, 1988 Org. code: DEF 724-15-01		
Drawn by: Joy Clark			
Checked by: T. H. Verdel			
Submitted by: T. H. Verdel			
Chief, Arch. Sec.	Sheet reference number V-2	JUL 88	Sheet 2 of 20